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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,766	10/23/2001	Chaoying Zhang	AUD1P009	7541

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EXAMINER	
HARVEY, DIONNE	
ART UNIT	**PAPER NUMBER**
2643	4

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
10/037,766	Zhang
Examiner	**Art Unit**
Dionne Harvey	2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-33 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-33 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Platt (US 5,226,086).

Regarding claim 1, Platt teaches a method for upgrading a hearing device(30) comprising: reading device information from the device; sending the device information to an upgrade server(26) via network(22,24), as broadly claimed; receiving the upgraded data and upgrading the device in accordance with the data (see column 4, lines 4-23).

Regarding claim 2, Platt teaches that the upgrading comprises programming the device in accordance with the data.

Regarding claim 3, Platt teaches that the method is preformed by a local programming station (12a-c) that operatively connects the hearing aid upgrade server via network (22,24) and wherein the local station (12a-c) is operatively connected to the hearing aid device (30a-c).

Regarding claim 4, in column 3, lns 50-53, Platt teaches that the local programming station is provided at a hearing aid dispensing office.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 5-10, 14-17, 21-23 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platt (US 5,226,086) in view of Trovato (US 6,469,742).

Regarding claim 5, Platt does not clearly teach that the hearing device is reprogrammable. Trovato teaches a system in which consumer electronic devices are adaptably upgradeable via the Internet network. It would have been obvious for one of ordinary skill in the art at the time of the invention to alter the hearing aid devices of Platt such that they are continuously reprogrammable, thereby permitting the user to take advantage of technological advances in the art without mandating the purchase of an entirely new hearing aid device.

Regarding claim 6, The combination of Platt and Trovato does not clearly teach that the programming of the hearing aid device operates to store an algorithm in the hearing aid device so as to enhance sound signals. However, the Examiner takes the Official Notice that programming via storage of algorithms is well known in the art and would have been obvious in computer to computer communications over a network, since algorithms permit the compression of data for the distribution of software across a computer network (see cited reference Goldman 6,615,405).

Regarding claims 7-9, The combination of Platt and Trovato teaches that the network is the Internet and the method is implemented by computer.

Regarding claims 10,22 and 32, The combination of Platt and Trovato teaches a method for upgrading a hearing aid device comprising: connecting the hearing aid device to a programming system(18); reading device information from the hearing device (see column 4, lines 9-11); coupling the hearing aid programming system(20) to a remote upgrade server(26) through a network(22,24); requesting the upgrade based upon the device information (column 4, lines 11-15); receiving at the programming system the requested upgrade for the hearing aid device through the network and installing the requested upgrade in the hearing aid device whereby the device operates in accordance with the upgraded software (column 4, lns 15-21). Trovato teaches that said device upgrades may include upgraded software. It would have been obvious for one of ordinary skill in the art at the time of the invention to provide a hearing aid device having the capability of being upgraded via software, in which case new data may be easily supplied to the customer's unit with the use of an interface.

Regarding claim 14, Platt does not clearly teach that the hearing device is reprogrammable. Trovato teaches a system in which consumer electronic devices are adaptably upgradeable via Internet network. It would have been obvious for one of ordinary skill in the art at the time of the invention to alter the hearing aid devices of Platt such that they are continuous reprogrammable, thereby permitting the user to take advantage of technological advances in the art without mandating the purchase of an entirely new hearing aid device.

Regarding claim 15, The combination of Platt and Trovato teaches that said programming of the reprogrammable memory operates to store upgraded software in the hearing aid device, the software being used to enhance sound signals for the user.

Regarding claim 16, The combination of Platt and Trovato teaches that the network is the Internet.

Regarding claims 17 and 23, Platt teaches that reading is performed by electronically reading the device information.

Regarding claim 21, The combination of Platt and Trovato does not clearly teach that notification is provided that the device has been modified such that refitting is needed. However, the Examiner takes the Official Notice that modifier indicators, such as those used in computer disk drives such a red-green light, or computer screen message, are well known in the art and would have been obvious for the purpose of notifying the user that said upgrade has been completed or that said upgrade is in the process of being carried out, so as to avoid premature removal of said hearing aid from its' network connection.

Regarding claims 29-31, Platt teaches means for upgrading a hearing aid device comprising: connecting a hearing aid device to a hearing aid programming system; reading device information(20) from the hearing aid device(30); coupling the hearing aid programming system to a remote hearing aid upgrade server(26); sending the device information to a hearing aid upgrade server via a network(22,18,24) and requesting upgrade software for the hearing aid device; subsequently receiving upgrade data from the hearing aid upgrade server via the network; and

upgrading the hearing aid device based upon the upgrade data. Platt does not specifically teach that the means for reading, sending, recieving and upgrading comprises computer program code. Trovato teaches that it is well known in the art to upgrade the programming of a hearing aid device using software, i.e. ,computer program code. It would have been obvious for one of ordinary skill in the art at the time of the invention to provide a hearing aid device having the capability of being upgraded via software, in which case new data may be easily supplied to the customer's unit with the use of an interface.

3. Claims 11-13,18,27,28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platt (US 5,226,086) in view of Trovato (US 6,469,742) as applied to claims 10,22 and 32 above, and further in view of Weidner (US 6,556,686).

Regarding claims 11 and 28, the combination of Platt and Trovato does not teach that the method further includes determining whether the hearing aid device is suitable for upgrade based upon the device information. In column 4, lines 33-40, Weidner teaches that suitability of the device for upgrade is determined via provision of a device identification number. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Platt, Trovato and Weidner, so as to upgrade the device only in accordance with appropriate data.

Regarding claims 12,13,27 and 33, the combination of Platt, Trovato and Weidner, does not specifically teach that a password is required for entry to the hearing aid programming system.

However, the Examiner takes Official Notice that the use of a password for access to a computer or to network servers, are well known in the art for the purpose of protection against unauthorized usage.

Regarding claim 18, Weidner does not specifically teach that the device identification number represents a serial number. However, it would have been obvious for one of ordinary skill in the art at the time of the invention to use an identification number being representative of any number of things for the same reasons set forth in the rejection of claim 11.

4. Claims 19-20 and 24-26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Platt (US 5,226,086) in view of Trovato, as applied to claims 10 and 22 above, and further in view of Putvinski (WO/17819).

Regarding claims 19,20 and 24-26, the combination of Platt and Trovato does not specifically teach that requesting of the upgraded software sends the device information to the upgrade server or that said receiving comprises receiving returned device information from the remote hearing aid upgrade server through the network, and wherein the installing operates to install the upgraded software in the hearing aid device only when the device information obtained by said reading matches the returned device information.

On page 6, lines 18-26, Putvinski teaches that reprogramming of the memory includes sending device information to the upgrade source, receiving returned information by the upgrade

source and finally installing the upgraded software in the hearing aid device only when the device information obtained by said reading matches the returned device information.

It would have been obvious for one of ordinary skill in the art at the time of the invention to incorporate the step of Putvinski, for the purpose of isolating data appropriate to the specific device, for which information has been provided.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Goldman (US 6,615,405) teaches algorithms in data transmissions.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statements for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111. The examiner can normally be reaches on Monday through Friday from 8:30am to 6:00pm.

Any responses to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231

or faxed to:

(703) 308-6306, for formal communications for entry

Or:

(703) 308-6296, for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor(Receptionist)

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (703) 305-4708.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111.

D.H.

November 30, 2003

CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600